



2022
City of Bremerton
Stormwater Management Program
(SWMP)
Western Washington NPDES Phase II
Municipal Stormwater Permit
WAR04-5507

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Stormwater Management Program Summary

Introduction

The City of Bremerton (City) is surrounded by water, forest lands and scenic mountain views in the east and west, with majestic Mt. Rainier to the southeast. An average of 54” of rain falls on Bremerton every year that fills local lakes, wetlands, streams, and recharges our aquifers that provide drinking water. Shallow aquifers are recharged by rainfall and provide year around base flow in our streams.

Rainfall is a great asset for the area but our daily activities leave traces of pollution on the ground that mix with stormwater to be carried to local surface waters as runoff. Impervious surfaces such as paved streets, parking lots, building rooftops, and gravel areas are not able to infiltrate rainwater into the ground, so stormwater systems are constructed to collect and convey water to streams, lakes, and marine water ways to prevent flooding and keep roads open for use. Runoff also picks up pollutants like trash, chemicals, oils, dirt and sediment that can harm our streams, lakes, and Puget Sound. To protect these resources, best management practices (BMPs) were developed and are being implemented. Correct use of BMPs prevents erosion, eliminates potential pollutants through behavior change, removes pollutants in runoff, and protects water quality.

The Environmental Protection Agency (EPA) developed the National Pollutant Discharge Elimination System (NPDES) Permit, to regulate discharges from small Municipal Separate Storm Sewers Systems (MS4s). Washington State Department of Ecology was delegated authority to implement this program and to issue the stormwater permit to counties, cities, and the Washington State Department of Transportation. Bremerton is designated a Phase II Municipal Stormwater Permittee, population less than 100,000.

Program activities for 2022 are summarized in this Stormwater Management Program (SWMP) Plan. Required activities are addressed in the same order listed in the Permit. Each section has a short description of minimum performance measures, a summary of the existing program, and planned program components to fulfill Permit requirements. The Stormwater Program complies with the Growth Management Act, City’s Comprehensive Plan, Shoreline Master Plan, and supports the City’s Stormwater Comprehensive Plan which provides long range operational and capital improvement guidance for the Utility.

Bremerton’s Stormwater Utility manages system assets, budget, capital improvements, operation, maintenance, construction, street sweeping, environmental monitoring, restoration, private system inspections, stormwater code enforcement, and public education. Education and outreach provide the community with knowledge and tools to prevent and reduce stormwater pollution by changing practices that help to reduce pollution at the source. The city uses and promotes low impact development (LID) practices to minimize the impact of stormwater from the urban landscape. Stormwater treatment is included with transportation projects, facility improvement projects, and in

targeted areas to improve the quality of runoff. The Stormwater Program supports Park's Department redevelopment projects and partners with them to help improve water quality from their parks when possible. New and re-development, that meet the LID threshold, are required to include these practices and BMPs in their plans or provide evidence that LID is not feasible.

The broad-ranging Permit regulates activities that impact stormwater quality and quantity from the City's stormwater system. These requirements affect businesses, residents, development, and city activities. Bremerton's Public Works & Utilities (PW&U) Department coordinates, implements, provides compliance oversight, and performs required reporting for the Permit.

City of Bremerton Stormwater Management Program (SWMP)

The goals of the Stormwater program are:

- Comply with NPDES Stormwater Permit requirements,
- Comprehensive Stormwater Management Planning,
- Effectively and proactively manage, operate, and maintain the stormwater system,
- Strive to effectively manage stormwater runoff within the city limits,
- Provide education and outreach to staff and the public,
- Encourage public involvement with stormwater program activities,
- Provide an acceptable level of service, which includes:
 - Prevent flooding,
 - System condition evaluation and monitoring,
 - Upgrade and replace older and failing assets,
- Protect environmental resources by:
 - Protecting and improving water quality,
 - Reducing stormwater runoff quantity,
 - Restoring streams and eliminating fish barriers.
- Promote pollution prevention through education and inspections,
- Maintain and update stormwater GIS system mapping,
- Identify and prioritize water quality improvement retrofit sites,
- Install, monitor, and maintain water quality retrofit treatment systems,
- Assess and prioritize watershed water quality goals,
- Comply with Total Maximum Daily Load (TMDL) requirements,
- Maintain a balanced budget for the program.

Legal Authority

Bremerton established the Stormwater Utility in 1994 pursuant to Ordinance 4454 as codified in the Bremerton Municipal Code (BMC) 15.04 - Stormwater. Funding for the Stormwater Utility is provided by user fees as codified in Bremerton Municipal Code (BMC) Title 3.01 Rate and Fees. Bremerton's SWMP is updated annually as required by the Stormwater Permit and as codified in BMC 15.04.050 - Stormwater Management Program (SWMP).

Bremerton Municipal Code

Bremerton Municipal Code (BMC) section 15.04-Stormwater establishes regulations to prevent or reduce stormwater pollution from human activities. Bremerton adopted Ecology's Stormwater Management Manual for Western Washington (SWMMWW) as the guidance to establish the minimum requirements for stormwater pollution prevention in existing and new or redevelopment. A portion of Bremerton's stormwater system is combined with the sanitary sewer system, but the same rules are applied to all areas of the system to provide consistency in regulating activities.

Bremerton was reissued the Stormwater Permit (Permit) on August 1, 2019, by the Washington State Department of Ecology (DOE). Regulatory statutes governing the Permit are the State of Washington Water Pollution Control Law, Chapter 90.48 Revised Code of Washington (RCW) and the Federal Water Pollution Control Act (The Clean Water Act) Title 33 United States Code, Section 1251 *et seq.*

Implementation of the SWMP is tracked and evaluated to improve the program and to fulfill Permit requirements. Cost for development and implementation of the SWMP is tracked as required by the Permit. Bremerton has partnered with other agencies and cities to coordinate stormwater related policies, public education, programs, and projects through interlocal agreements and coordination groups.

Implementation of this SWMP is expected to reduce the discharge of pollutants from the MS4 to the Maximum Extent Practicable (MEP) and will protect beneficial uses of local receiving waters. The Program meets state requirements for use of all known, available, and reasonable methods of prevention, control, and treatment (AKART) to protect water quality.

S5.C.1 Stormwater Planning

The objective of watershed-scale stormwater planning is to identify a stormwater management strategy or strategies that result in hydrologic and water quality conditions that fully support "existing uses," and "designated uses," as those terms are defined in WAC 173-201A-020, throughout the stream system.

This is a new requirement in the 2019 Stormwater Permit that is being implemented. In 2016 the city started a similar evaluation process and identified Oyster Bay and Ostrich Creek Basins as the highest priority areas where water quality improvement could be achieved with specific projects. Ostrich Creek is the most polluted stream in Kitsap County and can benefit from further evaluation. Projects to improve water quality and address some quantity issues are underway and listed below:

1. Planning and project implementation for Ostrich and Oyster Bays, and Kitsap Lake watersheds are underway. Projects include:
 - a. New fish passible structure under Kitsap Way, which was recently constructed,

- b. Ostrich Creek Stormwater Treatment Retrofit construction which is currently installing treatment at 14 locations will be completed this year.
- c. Price Rd. and Brentwood Drive fish barriers removal will be constructed in 2022 and 2023 using bridges to eliminate the barriers.
- d. Marine Drive and Kitsap Way Stormwater Treatment Retrofits were completed in 2020 using Modular Wetlands treatment vaults and 250' of infiltration gallery to reduce runoff quantity.

Kitsap Lake is a priority drainage basin due to elevated phosphorus and fecal coliform TMDLs that affect recreational use and contribute to poor water quality of the lake. Projects to improve water quality of the lake and remove a fish barrier are listed below:

- a. Kitsap Lake stormwater treatment design project is underway and will be completed this year for 4 locations that have significant impact to water quality which directly affects Kitsap Creek and Dyes Inlet where the stream discharges. Construction is expected to be completed in the next 3 years.
- b. Kitsap Lake algae control and aquatic vegetation harvesting is an ongoing program to reduce phosphorus in the lake water to reduce algae blooms. The lake's discharge is Kitsap Creek that flows into Chico Creek and outflows to Dyes Inlet next to conditionally approved shellfish beds.
- c. Preliminary design to replace the culvert under Northlake Way, the lake's discharge conveyance, was completed in 2021. Funding for the final design and construction is actively being sought to support this project.

Work in 2022 includes:

1. Completion of Oyster and Ostrich Bay Watershed preservation and restoration plan with additional projects to finish the retrofit effort in these basins. Many of the identified projects are under construction or on the 6-year CIP. The projects are being implemented to protect and restore these waters.
2. Kitsap Lake Watershed Restoration and Management Plan will be completed and have new projects identified for implementation over the next 10 years.

Stormwater Management Action Planning (SMAP) is an ongoing effort that will identify new priority basins and specific projects that will be added to the CIP. This effort follows Ecology's guidance.

S5.C.1.a Convene an Inter-Disciplinary Team

Bremerton's team consists of staff and management from Public Works divisions including Engineering, Stormwater Operations, Maintenance, Facilities, Community Development, and the Parks Departments, and Kitsap Public Health. Bremerton works closely with Kitsap County to coordinate stormwater pollution prevention activities and treatment retrofits to improve water quality. In 2019-21, ad hoc meetings were held with individual groups, and staff, related to their areas of responsibility within the city's

organization. Topics reviewed included Permit required stormwater actions, pollution prevention, land use and zoning, buildable lands inventory, density, road cover, development pressure, existing areas with minimal water quality and flow control treatment, and existing water quality data.

In 2022, group meetings will be held to review and share consolidated data, gather input on proposed actions, and to continue coordination efforts with Kitsap County and Port Orchard to support regional opportunities where MS4's intermingle.

S5.C.1.b Coordination with Long-Range Plan Updates

Describe how stormwater management needs and protection/improvement of receiving water health are (or are not) informing the planning update processes and influencing policies and implementation strategies. Develop a report that describes water quality and watershed protection policies, strategies, codes, and other measures intended to protect and improve local receiving water health through planning or taking into account stormwater management needs or limitations.

Bremerton's MS4 is an older system that was originally built as a combined sewer system (collected and conveyed both stormwater and wastewater to the discharge point) from the early 1900's through the 1970's. The primary purpose of the system was to provide safe ingress and egress throughout the city and protect property from flooding using collection and conveyance systems. The combined system would regularly overflow combined sewage (CSOs) into Puget Sound when it rained. By 2009, approximately 90% of the stormwater system had been separated from the sanitary sewer system, but some areas are still combined. Many of these areas are in the Stormwater CIP as separation projects in the long-range capital improvement plan.

The CSO Reduction program achieved a 99.9% reduction in frequency and volume of overflows which significantly improved water quality in the region. Stormwater that used to be treated at the WWTP needs to be treated on-site or prior to discharge to receiving waters. Several stormwater treatment retrofit projects have been completed and many more are planned over the next 20 years.

Stormwater pollution reduction efforts have been ongoing for more than three decades with CSO reduction, and private property separation (separating private stormwater systems from the sanitary sewer). Installation of stormwater treatment retrofits has been a focus of the past 8 years.

A report will be developed in 2022 to summarize how the City's program has focused on improving water quality in the highest need areas and how successful the approach has been.

S5.C.1.c Low Impact Development (LID) Code-Related Requirements

Bremerton is required to use LID Principles and LID BMPs when updating, revising, and developing new local development-related codes, rules, standards, or other enforceable documents, as needed. The intent is to make LID the preferred and commonly-used approach to site development. The local development-related codes, rules, standards, or other enforceable documents shall be designed to minimize impervious surfaces, native vegetation loss, and stormwater runoff in all types of development situations, where feasible.

Bremerton Municipal code 15.04.100 requires the use of Low Impact Development (LID) best management practices (BMPs) to manage stormwater runoff for new and redevelopment. The City's Comprehensive Plan, sub-area plans, and related land development code, BMC 20 – Land Use, require and encourage use of LID where possible. Reduction of impervious areas is also encouraged where possible and balanced with public safety concerns in areas such as access road width for emergency, and maintenance vehicles.

A city-wide infiltration assessment was completed to identify where infiltration is most likely to be a successful method for stormwater onsite management. The assessment will assist our development engineering staff when evaluating new applicant plans.

Pervious pavement is incorporated into Public Works and Park's projects where feasible. There remains a concern of maintenance needs and overall efficacy. Options for reasonable maintenance are limited and if the pervious surface is not regularly cleaned it can grow moss which is a public safety concern. Stormwater treatment is included in transportation projects and provides efficiency in completing retrofits to improve stormwater quality from the MS4.

In 2022, BMC 15.04 will be updated to include specific requirements that promote retention of native vegetation, it is already encouraged in critical areas, to further protect natural resources. Appropriate members of the coordination group will be used to identify areas where processes, alternatives selection, and implementation can be further improved to support developers and capital projects in the city. Improved tracking of allowed variations related to LID being used in new and redevelopment projects will be implemented.

S5.C.1.d Stormwater Management Action Planning (SMAP)

Conduct Stormwater Management Action Planning per Ecology guidance (Ecology, 2019; Publication 19-10-010). SMAP requirements at a watershed scale must be completed for at least one priority catchment located within the city's jurisdiction.

The City of Bremerton is completing Stormwater Management Action Planning as outlined in the Stormwater Management Action Planning Guidance provided by Ecology (Ecology, 2019; Publication 19-10-010). The effort will use existing data and determine

which watershed would benefit most from prioritized actions to restore water quality and improve overall habitat.

The program includes development of a watershed inventory table as a deliverable to Ecology by March 2022, along with a prioritized list of receiving waters by June 2022. Development of a SMAP for two high priority catchment areas will be completed and submitted to Ecology by March 2023.

These are components of the SMAP effort:

Develop Supplemental Water Quality and Flow Data to Inform Receiving Water Assessment:

- Pollutant loading analysis of watersheds (GIS Desktop Analysis)
- Link pollutant loading to receiving water impacts (GIS Desktop Analysis)
- Nearshore and deep marine water sediment pollutant potential analysis (Existing reports analysis, Black, Lanksbury and Coastal Data)
- Link nearshore and deep marine water sediment pollutant analysis to stormwater outfall pollutant potential (GIS Desktop Analysis)
- Identify local beneficial uses and desired water quality conditions

Assess Stormwater Management Impacts for Each Basin (GIS Desktop Analysis)

- Impervious area, % by basin
- Land use
- Density
- Road Cover
- Development pressure
- Existing areas with minimal water quality and flow control treatment

Prioritize Watersheds

- Visualize WQ and flow data for each basin (Heat Mapping)
- Visualize stormwater management impacts for each basin (Heat Mapping)
- Develop basin prioritization and ranking process (internal process)
- Stakeholder input (external stakeholder and public outreach process)
- Identify and document basin ranking and prioritization outcomes (a report or spreadsheet)
- Select high priority basin (internal process)
- Select high priority catchment (internal process)

Action Plan for High Priority Catchment

- Identify up to 6 potential retrofit projects (Field mapping/evaluation)

- Perform analysis of cost-effectiveness vs. receiving water benefit for each project (Desktop analysis using existing cost / benefit data)
- Develop preliminary design for top two (2) retrofit projects (Engineering Design to 30%)
- Identify, evaluate, and select non-structural stormwater management actions for optimum benefit for the highest priority beneficial use and water quality problem (Desktop analysis, internal process, narrative report,)

S5.C.2 Public Education and Outreach

Include an education and outreach program designed to build general awareness about methods to address and reduce impacts from stormwater runoff, effect behavior change to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts, and create stewardship opportunities that encourage community engagement in addressing the impacts from stormwater runoff.

Bremerton's education program goal is to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts. Brochures, signs on street sweepers, utility bill inserts, school and other public presentations, e-news, display booths at community events, and targeted business-specific mailings are methods used to provide information to residents, businesses, industries, elected officials, and policy makers.

S5.C.2 Provide an education and outreach program

The City of Bremerton has partnered with Kitsap County Public Works, through an inter-local agreement, and other regional agencies to form the West Sound Stormwater Outreach Group (WSSOG). The WSSOG collaborative effort develops, implements, and funds stormwater education, outreach messages, materials, activities, and program assessment tools for the public, businesses, and other target audiences.

This regional program provides education and outreach with a consistent message through sharing of resources and ideas. WSSOG educational materials are used within Bremerton's existing programs including pet waste management, outreach to the automotive industry, vehicle maintenance, paint and household hazardous chemical disposal, the regional spills reporting hotline, and natural yard care. Bremerton promotes the use of the Kitsap County Moderate Risk Waste Facility.

Pet waste bag dispensers have been placed throughout Bremerton to raise awareness of the impact from pet waste left on the sidewalks and in our parks, and to promote behavior change. The pet waste management program is used to meet permit requirement S5.C.2.a.ii, Behavior Change, to affect behavior change in the target audience, and to meet the TMDL requirement in the Permit. More than 50 City owned and maintained dispensers are installed in parks, public right-of-way, and on City-owned properties. Residents in Bremerton can request pet waste bag dispensers through the WSSOG ILA program and will maintain the unit under the terms of the agreement they

must sign. There are several throughout the city that are maintained through this program. Additional dispensers are at the Port of Bremerton Marina and on private properties around Bremerton. Bremerton provides over 180,000 bags per year and will continue this service in 2022.

Several large educational signs were posted at city-owned facilities including parking garages, police and fire stations, and Public Works facilities that support the “Puget Sound Starts Here” campaign and promote spills reporting. Other opportunities will be looked for in the upcoming year. A new natural yard care campaign is being implemented through WSSOG.

A residential rain garden program was implemented in 2017 for a targeted area to separate stormwater from the sanitary sewer and to see how well the program worked. In late 2019 Bremerton implemented an interlocal agreement with Kitsap Conservation District to continue the program city-wide through 2022. The expanded rain garden program provides stormwater management, pollution prevention, and water conservation educational and outreach information support to all areas within the city.

Working within the scope of the group’s interlocal agreements, WSSOG members evaluated the Work Plan to guide 2022’s activities. The primary focus for the upcoming year will be to continue our work with C+C on expanding and evaluating a social marketing campaign to address the new Natural Lawn Care behavior. Due to the ongoing concerns with COVID-19, partnering with the Master Gardeners to conduct online webinars will be critical to the success of the program. Additional tasks will include maintaining the existing Mutt Mitt, Spills Happen and PSSH programs.

[S5.C.2.a.ii.\(e\) Evaluate and report on behavior changes](#)

Public education activities are tracked and coordinated with WSSOG, and through information provided at events. The next key activity for the permit is evaluation and reporting no later than March 31, 2024. WSSOG is working towards this, and the campaign is being evaluated through a variety of mechanisms including pre- and post-surveys, follow up phone calls made by Master Gardeners and metrics such as coupons used.

Bremerton provides additional education and outreach efforts as opportunities arise and will continue this effort in 2022.

S5.C.3 Public Involvement and Participation

The City of Bremerton recognizes the inherent value of public involvement and participation in the Stormwater Program and encourages the public to become involved. Bremerton solicits ideas and opinions through the City’s website, Utility bill messages, e-News emails to customers, and has provided a survey specific to stormwater on its website.

Bremerton coordinates a portion of the “Sinclair Inlet Cleanup”, a volunteer cleanup effort supported by local agencies, business, and residents that was established in 1995. Stormwater educational materials and program information is provided and displayed at this event. The cleanup volunteers collect trash and discarded objects from the shorelines and many local streets, and installs storm drain markers when teams are available. Markers are provided to Bremerton’s schools and local neighborhoods upon request.

Public access TV and social media will be used in 2022 to encourage participation in program development and give residents ideas of how they can make a difference. Public involvement, participation, and partnerships for the Stormwater Program include LID guidance, assistance, and site assessments to identify opportunities for business and residents.

S5.C.3.a Public Participation for development and implementation of SWMP

Create opportunities for the public to participate in the decision-making processes involving the development, implementation, and update of the Permittee’s entire SWMP.

Public comment and participation is encouraged and accepted through Bremerton’s website, customer email list, direct contact, customer response calls, the Permitting Center, and the Utility’s customer service division. There is an online stormwater survey, and the public can email comments or suggestions about Bremerton’s stormwater program to the Stormwater Permit Coordinator. Efforts to get more public involvement will continue in 2022.

S5.C.3.b Post the Stormwater Management Plan (SWMP) on the City’s website

This 2022 SWMP is posted on Bremerton’s website at: <http://www.bremertonwa.gov/DocumentCenter/View/1193> along with the 2021 annual Stormwater Report. The Stormwater Comprehensive Plan update will be posted for review and virtual open house will be setup for public comments and questions.

S5.C.4 MS4 Mapping and Documentation

Must have an ongoing program for mapping and documenting of the MS4.

Bremerton’s stormwater system GIS map includes the entire geographic area served, including areas of adjacent jurisdictions, watersheds, outfalls, receiving waters, stormwater treatment facilities, tributary areas, conveyance types, material, size, land use, and other items as required by the Permit. All connections between the city’s MS4 and other agencies are in the mapping system. The GIS map includes the systems of neighboring agencies that discharge into Bremerton’s MS4, and where Bremerton discharges into adjacent systems. System data are shared between the city and neighboring agencies as requested and agreed to in a memorandum of understanding. New stormwater assets including collection, treatment, and flow control BMPs are

added as construction is completed. New data are instantly available on handheld tablets for field staff to use when needed.

All known public and private stormwater facilities and conveyances within the city limits are in the map or on various layers that can be turned on and off to make the map legible and details easy to view. GIS users map interface can add layers for land use, topography, associated drainage areas, and areas that do not drain to surface waters which aides in illicit discharge detection and elimination. Drainage basins and sub-basin areas were updated in 2020.

S5.C.4.a Ongoing Mapping

Improvements to the maps, layers, and functionality of the system will continue in 2022.

S5.C.4.b New Mapping

No later than January 1, 2020, begin to collect size and material for all known MS4 outfalls during normal course of business (e.g. during field screening, inspection, or maintenance) and update records.

This requirement has been completed and the locations of all outfall sizes are clearly identified on GIS maps. Pipe size, and material are included in the attribute table and updated as new systems are constructed or errors are discovered.

The 2019 Permit has many new requirements for system mapping that include identifying all discharges from the MS4 to privately owned systems, having data in an all-electronic format that includes GIS, CAD drawing, or other software that can map and store points, lines, polygons, and associated attributes, and fully described mapping standards. All new Permit requirements have been met including:

- Known MS4 outfalls and known MS4 discharge points.
- Receiving waters, other than groundwater.
- Stormwater treatment and flow control BMPs/facilities owned or operated by the Permittee.
- Geographic areas served by the MS4 that do not discharge stormwater to surface waters.
- Tributary conveyances to all known outfalls and discharge points with a 24 inch nominal diameter or larger, or an equivalent cross-sectional area for non-pipe systems.

The following features or attributes (or both) are also mapped:

- Tributary conveyance type, material, and size.
 - Associated drainage areas.
 - Land use.

- Connections between the MS4 owned or operated by the Bremerton and other municipalities or public entities.
- All connections to the MS4 authorized or allowed by the Permittee after February 16, 2007.

In 2022 GIS map layer will be reviewed and updated with missing attribute data, and standards will be reviewed and updated as needed to improve new system entry.

S5.C.4.c Electronic Format Mapping

The stormwater system is mapped with ESRI ArcMap (GIS) on an internal network server. Remote access is provided for field staff who can edit layer details and add new data as it is discovered. New development, and new system details are continually added to the layers of the map by GIS technicians and field staff. This is an ongoing project, and an important part of the Stormwater Utility functions.

New MS4 assets are added to the GIS map after they are constructed and verified by field inspections.

In 2022, system development and support will continue along with system upgrades to consolidate and streamline the system to improve performance, reduce complexity, and standardize data entry options.

S5.C.4.e Providing Mapping to Other Permittees

Upon request, and to the extent appropriate, the City shall provide mapping information to federally recognized Indian Tribes, municipalities, and other Permittees. This Permit does not preclude Permittees from recovering reasonable costs associated with fulfilling mapping information requests by federally recognized Indian Tribes, municipalities, and other Permittees.

Bremerton shares stormwater system data on an annual basis with neighboring agencies per the “Memorandum of Understanding” (MOU) with Kitsap County and the City of Port Orchard. This was set up to provide support for ongoing stormwater system map sharing that includes system details, features, and general information where systems merge. The MOU includes support for reporting spills, TESC incidents, IDDE tracing, and source control issues.

S5.C.5 Illicit Discharge Detection and Elimination (IDDE)

The SWMP shall include an ongoing program designed to prevent, detect, characterize, trace, and eliminate illicit connections and illicit discharges into the MS4.

Illicit discharges violate water quality or sediment standards and are significant contributors of pollution that enter waters of the United States. This may include a discharge from any conveyance or system of conveyances used for collecting and

conveying storm water runoff or a system of discharges from MS4's, including any spills not under the purview of another responding authority, into the City's MS4.

The City has an ongoing program to detect and remove illicit connections and discharges. Some of the oldest areas in Bremerton have combined sewers so stormwater goes to the sanitary sewer system and is treated at the wastewater treatment plant before being discharged into Sinclair Inlet. Regardless of this fact, the consistent message in Bremerton is, "Only Rain Down the Drain" to deliver a clear directive to prevent illicit discharges and enforce consistent behavior. The spill reporting hotline phone number and email address is prominently displayed on the sides of Bremerton's large street sweepers, and on handouts and brochures provided to the public. The Illicit Discharge Detection and Elimination (IDDE) program started in 1995 has continued to evolve as techniques and regulations change to comply with Permit requirements.

Bremerton developed its own software application, Bremerton1, that can be downloaded from the Apple® or Google® stores, for use on cell phones or desktop computers. The application can be used by the public to submit reports of spills, accidents, and various issues the city addresses. All reported issues are recorded in the Customer Response database for use in various analysis and reports.

In 2022, the program will continue to monitor water quality at outfalls, using the dry weather sampling plan, and will respond to notifications, complaints, and reports when they are submitted. This year, sampling and system inspections will work up into the Pine Road and Pacific Avenue stormwater systems to look for water quality issues and will respond as needed.

Environmental Tracking Systems Reports (ERTS) from Ecology are recorded in the Customer Response database and dispatched to trained staff from Public Works, or Fire Department as needed. Procedures are in place to provide staff guidance on how to proceed with each type of incident.

Spills occur and are reported in various ways to Public Works. The incident report and the amount of material dictate the City's response level. Response is a coordinated effort with Public Works staff as lead responders for most events. Bremerton's Fire Department responds to larger incidents with Puget Sound Naval Shipyard Hazmat Unit and Washington State Department of Transportation as backup resources. Bremerton distributes and maintains spill kits in all city vehicles, service trucks have larger kits, and city owned facilities have significant cleanup supplies. A portable vacuum system was purchased and installed on a trailer for quick dispatch to incidents where vacuuming materials is needed. Many Public Works and Utilities staff are trained to operate this equipment.

S5.C.5.c Prohibit non-stormwater and illicit discharges to the MS4

Implement an ordinance or other regulatory mechanism to effectively prohibit non-stormwater, illicit discharges into the MS4 to the maximum extent allowable under State and Federal law.

Bremerton has an ordinance to effectively prohibit non-stormwater, illicit discharges into the MS4 to the maximum extent allowable under state and federal law. Bremerton Municipal Code (BMC) 15.04.190 PROHIBITED ACTS includes a list of “Prohibited Discharges, BMC 15.04 190(b)”, including non-stormwater, illegal discharges, and actions such as dumping, damaging, or removing facilities of the MS4. Violations under this section are punishable as a misdemeanor and escalating enforcement is authorized pursuant BMC Title 1.12 General Provisions, Code Enforcement.

In 2022, BMC 15.04 will have a significant update to meet new Permit requirements and to clarify stormwater program requirements for compliance and enforcement actions.

S5.C.5.c.iii Address discharges identified as significant sources of pollutants

The Permittee shall further address any category of discharges in (i) or (ii) above if the discharges are identified as significant sources of pollutants to waters of the State.

Bremerton’s IDDE program monitors the MS4 for potential cross connections and enforces corrective actions as authorized by BMC 15.04. The water quality and sediment standards compliance requirements in the Permit defines parameters that are used to support enforcement actions. Standard operating procedures for City Staff, along with public education of residents and businesses, work to prevent these discharges from occurring.

In 2022, staff will continue their effort to prevent contamination of runoff, identify illicit discharges, and take corrective actions.

S5.C.5.c.iv Escalating enforcement procedures and actions

The ordinance or other regulatory mechanism shall include escalating enforcement procedures and actions.

BMC section 15.04.210 Violation Enforcement – Penalty, provides an escalating enforcement strategy up to and including civil financial penalties, BMC Title 1.04 Code Enforcement, and/or confinement in Jail per BMC Title 1.12 General Provisions, Code Enforcement.

In 2022, Escalating enforcement procedures and actions will be updated to be more effective and clear for enforcement personnel and the public.

S5.C.5.d Implement an IDDE Program

Implement an ongoing program to detect and address non-stormwater discharges, including spills, and illicit connections into the MS4.

Bremerton has an Illicit Discharge Detection and Elimination (IDDE) program that inspects portions of the MS4 and private stormwater systems annually. This program is a key component to reduce stormwater pollution and sources that impact local waters.

Bremerton's IDDE program actively looks for non-stormwater discharges, spills, illicit connections, and illegal dumping into the MS4. The Program has identified priority urban areas likely to have illicit discharges and has defined field assessment activities. Outfall locations have been documented and are screened annually for illicit discharges.

Bremerton has had an ongoing dry weather outfall reconnaissance inventory program since 1997. All outfalls discharging to marine and fresh waters have been inventoried, inspected, and screened.

In 2022, stormwater outfalls will be inspected during dry weather and screened for illicit connections.

Bremerton promotes and advertises its Customer Response Line (360-473-5920), responds to calls from 911 for emergencies, the "Bremerton1" application, and the regional hotline KITSAP1 (360-337-5777), and Kitsap County's SeeClickFix which is monitored by Kitsap County Public Works. Bremerton's response staff are dispatched by a central operator based on information provided by the caller, emailed report, or the Bremerton1 application. If the call is non-specific, the Customer Response staff will go to the site and determine who needs to be dispatched for incident control, or containment, and follow-up, in accordance with PW&U's policies. The responder's investigation report and resolution are recorded in a database with the call information to help identify areas of concern in the MS4. This system provides quick response for incidents involving the MS4 by dispatching the appropriate staff for the situation. All reports are logged and tracked from the initial report through resolution in a database.

For incidents that are beyond City capabilities, Bremerton alerts hazmat responders through 911 and other responsive agencies such as the Department of Ecology, Kitsap Department of Emergency Management, PSNS Emergency Response crew, and Kitsap Health District regional partners.

Investigations follows the Ecology 2013 Illicit Connection and Illicit Discharge Field Screening and Source Tracing Guidance Manual. Bremerton staff are trained to recognize illicit discharge to the stormwater system and procedures are in place to report, investigate, document, and resolve incidents when found or reported.

The "Spills Happen, Help Us Find Them" graphic with reporting phone number is on City Street sweepers, large signs at public facilities, and used in public outreach materials.

S5.C.5.d.i.(a) Complete an average of 12% field screening of the MS4 annually

All Permittees shall complete field screening for an average of 12% of the MS4 each year. Permittees shall annually track total percentage of the MS4 screened beginning August 1, 2019.

In 2022, Bremerton will continue systematic screening of the MS4 in the Pine Road and Pacific Avenue Basins.

S5.C.5.e. Implement a program designed to address illicit discharges

Implement an ongoing program designed to address illicit discharges, including spills and illicit connections, into the Permittee's MS4.

Bremerton's program includes:

Procedures for characterizing the nature of, and potential public or environmental threat posed by any illicit discharges found by or reported to the Permittee. Procedures address the evaluation of whether the discharge must be immediately contained and steps to be taken for containment of the discharge.

Procedures for tracing the source of an illicit discharge follows the Ecology 2013 Illicit Connection guidance manual. The program includes visual inspections, opening manholes, using mobile cameras, collecting samples and contracted laboratory services to analyze water samples outside of ability of field meters. Where practical, field equipment and kits are used for basic water quality parameters, and surfactants. Staff who complete inspections are trained to follow the inspection process and are encouraged to think outside of the box to resolve issues.

Procedures are in place for eliminating the discharge, including notification of appropriate authorities (including owners or operators of interconnected MS4s); technical assistance; follow-up inspections; and use of the compliance strategy developed pursuant to S5.C.5.c.iv, including escalating enforcement and legal actions if the discharge is not eliminated. Compliance with the provisions above is achieved by meeting the following timelines:

- Immediately respond to all illicit discharges, including spills, which are determined to constitute a threat to human health, welfare, or the environment, consistent with General Condition G3.
- Investigate (or refer to the appropriate agency with the authority to act) within 7 days, on average, any complaints, reports, or monitoring information that indicates a potential illicit discharge.
- Initiate an investigation within 21 days of any report or discovery of a suspected illicit connection to determine the source of the connection, the nature and

volume of discharge through the connection, and the party responsible for the connection.

- Upon confirmation of an illicit connection, use the standard operating procedures to document the issue and effort to eliminate the illicit connection within 6 months. All known illicit connections to the MS4 shall be eliminated.

S5.C.5.f Permitees shall train IDDE staff

Bremerton staff are responsible for identification, investigation, reporting, cleanup of illicit discharges, and termination, including spills and illicit connections. Staff involved in this program are trained to conduct these activities. Presentations, round table discussions, training videos, and classes are tools employed to train staff. Follow-up training is provided as needed to address changes in procedures, techniques, requirements or staffing. Training records are kept to document which staff are trained and who needs refresher training.

In 2022, IDDE Staff training will be reviewed and provided as needed.

S5.C.5.g Record Keeping

The City shall track and maintain records of the activities conducted to meet the requirements of this Section. Records shall be submitted for illicit discharges, spills and illicit connections including those that were found by, reported to, or investigated by the city during the previous calendar year in the annual report. Data shall include the information specified in (NPDES permit) Appendix 12 and WQWebIDDE.

Recordkeeping: Each incident is tracked, and records of the activities conducted to meet the requirements are maintained in the Customer Response database. Data for illicit discharges, spills and illicit connections including those that were found by, reported to, or investigated by the city during the previous calendar year are included in the annual report. The data include information specified in Appendix 12 and WQWebIDDE which is manually entered into the portal spreadsheet. Final submittals follow the instructions, timelines, and format as described in Appendix 12 of the SW Permit.

S5.C.6 Controlling Runoff from New and Redevelopment, and Construction Sites

Implement and enforce a program to reduce pollutants in stormwater runoff to a regulated MS4 from new development, redevelopment, and construction site activities. The program shall apply to private and public development, including transportation projects.

Bremerton's adopted Ecology's Stormwater Management Manual for Western Washington (SWMMWW) per BMC 15.04.020 – Adopted Manuals. Site development planning requires LID to be included application which is reviewed by staff for acceptance and approval.

Bremerton has developed, implemented, and enforces a program to reduce pollutants in stormwater runoff that enter the municipal separate storm sewer system from new development, redevelopment, and construction site activities. The program applies to both private and public projects.

S5.C.6.a The minimum performance measures are:

Implement an ordinance or other enforceable mechanism that addresses runoff from new development, redevelopment, and construction site projects. Each Permittee shall adopt and make effective a local program, no later than June 30, 2022, that meets the requirements of S5.C.6.b(i) through (iii), below, and shall apply to all applications submitted:

- *On or after July 1, 2022.*
- *Prior to January 1, 2017, that have not started construction by January 1, 2022*
- *Prior to July 1, 2022, that have not started construction by July 1, 2027.*

New and redevelopment must meet current stormwater regulations within a specified period of time from the date of project submission/approval. If the project is delayed beyond the accepted period of time, the stormwater portion will need to be updated to meet current requirements. See Phase II Municipal Stormwater Permit section C5.C.6, Controlling Runoff from New Development, Redevelopment, and Construction Sites for timeframe.

S5.C.6.c Permitting and Site Plan Review, and Inspection Program

Bremerton Municipal Code has the adopted and implemented codes that provide legal authority for site plan review, inspection, and escalating enforcement procedures necessary to implement the program in accordance with Permit conditions, including the minimum technical requirements in the 2019 Ecology Stormwater Management Manual for Western Washington.

Regulations are in place that include provisions to verify adequate long-term operations and maintenance (O&M) of new post-construction permanent stormwater facilities and best management practices (BMP) in accordance with Permit conditions. The program includes an annual inspection and/or approved alternative inspection frequency and maintenance standards for private drainage systems that are outlined in the 2019 Ecology Stormwater Management Manual for Western Washington.

A process is in place to record and track all inspections, maintenance, and enforcement actions by staff for inclusion in the Annual Report.

Appropriate information is provided to permit applicants regarding NDPES Construction and Industrial permits and the notice of intent (NOI) requirement.

Bremerton has a comprehensive land-use and development permit program. The program includes a permit review and inspection process that addresses the areas required by the Permit as follows:

- Continued to implement all existing stormwater codes and programs in compliance with Section S5.C.6 of the Permit.
- Continued to inspect all new development for permit compliance.
- Continued to provide stormwater training for staff and external partners in the development community.

Development Engineering works with Community Development to update workflow including tracking total and allowable impervious surface per site.

In 2022, Bremerton will conduct the following activities required under this section of the Permit:

- Update codes and policies to maintain, improve and adapt programs as necessary to meet permit and program objectives.
- Continue annual inspection of all privately-owned stormwater facilities.
- Implement and review Bremerton codes updated after December 31, 2016, to ensure consistency with LID requirements.
- Update the Stormwater Maintenance Manual to reflect changes to the Ecology Manual and add more proprietary treatment systems.
- Continue to implement the enforcement process for Bremerton staff to align with the updated stormwater code.

S5.C.7 Pollution Prevention and Operation and Maintenance for Municipal Operations

Each Permittee shall implement and document a program to regulate maintenance activities and to conduct maintenance activities by the Permittee to prevent or reduce stormwater impacts.

Bremerton has an Operation and Maintenance (O&M) program with the goal of preventing or reducing pollutant runoff from municipal operations. The maintenance program is divided into three groups: Stormwater, Facilities, and Parks Maintenance. Each group has their own system components and stormwater facilities to operate and maintain. The groups are trained to provide maintenance service for each of their facilities and features. A new digital tracking system is being implemented that will allow staff to enter actions using a web-based browser to provide a centralized record of all activities and outcomes.

S5.C.7.a Establish Maintenance Standards

Permittee shall implement maintenance standards that are as protective, or more protective, of facility function than those specified in Chapter 4 of Volume V of the

Stormwater Management Manual for Western Washington, or a Phase 1 program approved by Ecology. For facilities which do not have maintenance standards, the Permittee shall develop a maintenance standard. No later than June 30, 2022, Permittees shall update their maintenance standards as necessary to meet the requirements of this Section.

Bremerton has adopted and enforces the July 2019 edition of the SMMWW which meets this requirement. Bremerton's Operation and Maintenance Manual will be updated in 2022 and will continue to evolve as new technologies are developed and approved. The O&M Manual is provided to system owners when requested and is available as a downloadable document from the City's website under Public Works and Utilities in the Stormwater section.

S5.C.7.a.ii Maintenance Requirements Identified During Inspections

Unless there are circumstances beyond the Permittee's control, when an inspection identifies an exceedance of the maintenance standard, maintenance shall be performed:

- *Within 1 year for typical maintenance of facilities, except catch basins.*
- *Within 6 months for catch basins.*
- *Within 2 years for maintenance that requires capital construction of less than \$25,000.*

Bremerton completes maintenance on its permanent stormwater treatment and flow control BMPs/facilities annually or as needed based on inspection results. When deficiencies are found they are corrected immediately or within the next 30 days.

S5.C.7.b Maintenance of Stormwater Facilities Regulated by the Permittee

The program shall include provisions to verify adequate long-term O&M of stormwater treatment and flow control BMPs/facilities that are permitted and constructed pursuant to S.5.C.6.c and shall be maintained in accordance with S5.C.7.a.

Bremerton's stormwater development codes provide provisions and mechanisms that require new stormwater facilities O&M responsibilities to be clearly identified. Maintenance is conducted in accordance with maintenance standards established in the SWMMWW and Bremerton's Operation and Maintenance Manual is required, and system owners are compelled to keep their systems in good operating condition.

Review of these requirements will be completed in 2022 and updated as needed to clarify the requirements and expectations.

Annual inspections of all stormwater treatment and flow control BMPs/facilities that discharge to the MS4 and were permitted by the Permittee according to S5.C.6.c,

including those permitted in accordance with requirements adopted pursuant to the 2007-2019 Ecology municipal stormwater permits, are completed, and documented.

S5.C.7.c Maintenance of Stormwater Facilities Owned or Operated by the Permittee

City owned and operated stormwater treatment and flow control BMPs/facilities are inspected and appropriately maintained on an annual basis. Stormwater ponds are inspected after major storms to ensure they are fully functional and operating as designed. Repairs and appropriate maintenance action are completed in accordance with maintenance standards established above, based on the results of the inspections.

S5.C.7.c.i Annual Inspection Program

Each Permittee shall implement a program to annually inspect all municipally owned or operated stormwater treatment and flow control BMPs/facilities and taking appropriate maintenance actions in accordance with the adopted maintenance standards.

An annual inspection program ensures these sites are operating and good working condition. Maintenance of all municipally owned or operated stormwater treatment and flow control BMPs/facilities is completed in accordance with the adopted maintenance standards.

S5.C.7.c.ii Spot Check Inspection After Major Storm Events

Bremerton routinely checks permanent stormwater treatment and flow control BMPs/facilities during and after large storms to verify facility function and integrity. Maintenance and/or repairs are completed as needed to maintain facility operation and functionality.

S5.C.7.c.iii Inspection of catch basins and inlets owned by the Permittee

Inspect all catch basins and inlets owned or operated by the Permittee every two years. Clean catch basins if the inspection indicates cleaning is needed to comply with maintenance standards established in the Stormwater Management Manual for Western Washington. Decant water shall be disposed of in accordance with Appendix 6 Street Waste Disposal.

Prior to 2022, catch basins and inlets owned or operated by Bremerton were cleaned annually as the method for managing the system. Beginning in 2022, catch basin inspections will be used to determine maintenance needs and cycle through the system on a 2-year basis.

Decant water is disposed of in accordance with Appendix 6 – Street Waste Disposal, at the Oyster Bay Public Works complex decant facility. Sediment, in decant water, settles and the water is discharged to the sanitary sewer system and treated at the wastewater treatment plant. All catch basin sediment, debris and street sweeping spoils are disposed of in accordance with Department of Ecology's Dangerous Waste Regulations

(Chapter 173-303-016 WAC) with a disposal permit through Waste Management. The decant facility is operated under a permit and annually inspected by the Kitsap Public Health District.

S5.C.7.c.iv Compliance with inspection requirements criteria

Compliance with the inspection requirements in S5.C.7.c.i-iii, above, shall be determined by the presence of an established inspection program achieving at least 95% of required inspections.

Inspection of the MS4 was completed during regular maintenance operations and recorded in the City's GIS map throughout the year since 2007. In 2022, assigned maintenance staff will inspect stormwater batch basins for sediment load and damage. Results of the inspection will provide a list of sites in need of cleaning or identify deficiencies that need repairs. Work will be scheduled to complete needed work and prioritized based on significance of the issue.

A GIS based map of all city stormwater assets is available to staff on desktop computers, laptops, smart phones, and handheld tablets. In 2022, maintenance, inspections, correspondence documentation, and tracking will continue to be incorporated into the GIS system databases.

Facilities Division and Parks Department stormwater assets are inspected and documented in a cloud-based system to centralize data archiving. Private stormwater systems are inspected by the Public Works Compliance Division. All correspondence and reports from these private inspections are kept in both paper and electronic files attached to a GIS layer. These are being moved to the cloud-based system.

S5.C.7.d Implement practices to reduce stormwater impacts from City properties

Implement practices, policies, and procedures to reduce stormwater impacts associated with runoff from all lands owned or maintained by the Permittee, and road maintenance activities under the functional control of the Permittee. No later than December 31, 2022, document the practices, policies, and procedures. Lands owned or maintained by the Permittee include, but are not limited to, streets, parking lots, roads, highways, buildings, parks, open space, road right-of-ways, maintenance yards, and stormwater treatment and flow control BMPs/facilities. The following activities shall be addressed:

- *Pipe cleaning*
- *Cleaning of culverts that convey stormwater in ditch systems*
- *Ditch maintenance*
- *Street cleaning*
- *Road repair and resurfacing, including pavement grinding*
- *Snow and ice control*
- *Utility installation*
- *Pavement striping maintenance*
- *Maintaining roadside areas, including vegetation management*
- *Dust control*

- *Application of fertilizers, pesticides, and herbicides according to the instructions for their use, including reducing nutrients and pesticides using alternatives that minimize environmental impacts*
- *Sediment and erosion control*
- *Landscape maintenance and vegetation disposal*
- *Trash and pet waste management*
- *Building exterior cleaning and maintenance*

Bremerton is a member of the Regional Road Maintenance Endangered Species Act (RRMP ESA) Program, since December 2001, and has implemented the program elements in its activities. The program includes all the activities listed under section S5.C.7.d and has a training element.

Bremerton has policies and procedures in place for building and grounds maintenance, including parks, trash management, and sediment control. Only qualified personnel, in compliance with policies, may use fertilizers, pesticides, and herbicides. Good housekeeping practices are in place at all City owned properties and facilities. Municipal operations and maintenance staff are trained to use pollution prevention techniques and practices to help reduce and prevent pollution of stormwater runoff. All city streets are swept at least twice per year with major roadways being swept twice per week. Sweeping spoils are disposed of in accordance with Department of Ecology's Dangerous Waste Regulations (Chapter 173-303-016 WAC). During the fall months and into the winter, sweepers are actively collecting leaves and debris 16 hours a day, five days per week or more if necessary. This keeps catch basins clear for stormwater, helps protect water quality, and keeps the system functioning.

In 2022, these programs and training will be reviewed to determine areas where improvements can be made and to refresh staff knowledge. Bremerton will collect existing plans and policies to complete a thorough review of above referenced materials to ensure full compliance with the Permit.

S5.C.7.e Implement an ongoing training program for employees

Implement an ongoing training program for employees of the Permittee whose primary construction, operations, or maintenance job functions may impact stormwater quality. The training program shall address the importance of protecting water quality, operation and maintenance standards, inspection procedures, relevant SWPPPs, selecting appropriate BMPs, ways to perform their job activities to prevent or minimize impacts to water quality, and procedures for reporting water quality concerns. Follow-up training shall be provided as needed to address changes in procedures, techniques, requirements, or staffing. Permittees shall document and maintain records of training provided. The staff training records to be kept include dates, activities or course descriptions, and names and positions of staff in attendance.

Bremerton has a comprehensive training program to prevent pollution at the source. A well-trained workforce reduces or prevents pollution of stormwater runoff and

degradation of water quality from City operations and maintenance activities. Staff are provided with training opportunities to obtain certifications for CESCL, LID planning and construction. Training for operations and maintenance staff covering basic stormwater pollution prevention, IDDE, spill response, and good housekeeping measures is provided. Several resources have been made available to City staff that include intranet video training for: IDDE; construction site stormwater control and BMPs; stormwater pollution prevention; and on-demand webinars covering many stormwater subjects. All Bremerton inspectors are CESCL certified as well as Public Works supervisors and specific Parks Department staff. A new training system was implemented in 2021 to further improve staff education opportunities and tracking. Training modules are assigned to city staff and management that includes a video and test, based on their job function to expand stormwater knowledge.

S5.C.7.f Implement a SWPPP for all equipment maintenance or storage yards

Implement a Stormwater Pollution Prevention Plan (SWPPP) for all heavy equipment maintenance or storage yards, and material storage facilities owned or operated by the Permittee in areas subject to this Permit that are not required to have coverage under the Industrial Stormwater General Permit or another NPDES permit that authorizes stormwater discharges associated with the activity.

SWPPPs have been developed and implemented for all maintenance, and material storage facilities. City owned facilities and Parks also have SWPPPs to define requirements for good housekeeping measures and inspections. Stormwater system inspection and maintenance are included in SWPPPs activities which are documented by assigned staff. The Oyster Bay Public Works Facility SWPPP was updated in 2022. SWPPPs will continue to be reviewed and updated in 2022.

S5.C.7.g Record of inspections and maintenance requirements

Maintain records of the activities conducted to meet the requirements of this section.

Facilities, Parks, Compliance, and Stormwater divisions complete inspections and document the results for their locations. Work orders are submitted to the Stormwater Maintenance group by Facilities and Parks staff for assistance beyond their abilities. Tracking is being documented in a cloud-based system to improve the program.

In 2022, the cloud-based program will continue to be used for site inspections and documentation.

S5.C.8 Source Control Program for Existing Development

A source control program is a new requirement of the Permit, effective August 2019. Historically, Kitsap Public Health provided a source control program, but the new program is an expanded version that covers additional stormwater concerns.

S5.C.8.a Implement a Program to Prevent and Reduce Pollutants in Runoff from Areas That Discharge to the MS4

Source control program development began in 2020 and will continue in 2022 to include inspections, supporting codes, application of operational source control and structural source control BMPs and/or treatment BMPs/facilities, or both, at pollution generating sources associated with existing land uses and activities.

The program will be in place by the end of 2022 and fully implemented on January 1, 2023. Updated codes, to support program implementation, will be completed in 2022 with a new position being requested to complete the inspections.

S5.C.8.b Minimum Performance Measures of Source Control Program

The source control program will include municipal code updates and other enforceable documents that require the application of source control BMPs for pollutant generating sources associated with existing land uses and activities, as identified in Appendix 8 of the Permit. Applicable operational source control BMPs will be required for all pollutant generating sources. Structural source control BMPs, or treatment BMPs/facilities, or both, will be required for pollutant generating sources if operational source control BMPs do not prevent illicit discharges or violations of surface water, groundwater, or sediment management standards because of inadequate stormwater controls. Implementation of source control requirements will use education and technical assistance programs that will support formal enforcement as needed.

Bremerton will update the established inventory of public and private institutional, commercial, and industrial sites which have the potential to generate pollutants to the MS4. The inventory includes:

- (a) Businesses and/or sites identified based on the presence of activities that are pollutant generating (refer to Appendix 8 of the 2019 Municipal Phase II Stormwater Permit for Standard Industrial Codes).
- (b) Other pollutant generating sources, based on complaint response, such as: home-based businesses and multi-family sites.

The inspection program will be implemented on January 1, 2023 for sites identified pursuant to Appendix 8 of the Permit.

S5.C.8.b.i Source Control BMPs

By August 1, 2022, Bremerton will adopt and make effective ordinance(s), or other enforceable documents, requiring the application of source control BMPs for pollutant generating sources associated with existing land uses and activities (see NPDES permit Appendix 8 to identify pollutant generating sources).

S5.C.8.b.ii Potential Pollutants to MS4

By August 1, 2022, Bremerton will have a complete inventory that identifies publicly and privately owned institutional, commercial, and industrial sites which have the potential to generate pollutants to the MS4.

S5.C.8.b.iii Inspection Program for Potentially Polluting Sites

By January 1, 2023, Bremerton will implement an inspection program for sites identified pursuant to S5.C.8.b.ii of the Permit.

S5.C.8.b.iv Progressive Enforcement Policy for Non-Compliance

By January 1, 2023, Bremerton will implement a progressive enforcement policy that requires sites to comply with stormwater requirements within a reasonable time period.

S5.C.8.b.v Source Control Program Staff Training

Permittees shall train staff who are responsible for implementing the source control program to conduct these activities. The ongoing training program shall cover the legal authority for source control, source control BMPs and their proper application, inspection protocols, lessons learned, typical cases, and enforcement procedures. Follow-up training shall be provided as needed to address changes in procedures, techniques, requirements, or staff. Permittees shall document and maintain records of the training provided and the staff trained.

Staff training for the new source control program will be provided. Details for this part of the program will be developed in 2022. More information will be available as the program and resources are developed.

Activities Planned for 2022

Stormwater Comprehensive Plan Update

Bremerton will complete the Stormwater Comprehensive Plan update. The plan includes:

- Updated 6 & 20 year capital improvement plan with treatment retrofit opportunities,
- Inventory of surface waters and known water quality problems,
- Inventory of salmon migration and habitat barriers within the city limits,
- Stormwater Permit compliance program elements,
- Overall review of Bremerton's stormwater program,
- Water quality restoration activities as required by the Sinclair Dyes Inlets Fecal Coliform TMDL.

In 2022, BMC 15.04, the Stormwater code, will be updated to address existing deficiencies, clarify the permitting process, adopt new programs, and enhance escalating enforcement measures.

S5.C.1 Stormwater Planning

Stormwater Management Action Planning (SMAP) will continue. The City will complete the following plans :

3. Oyster and Ostrich Bay Watershed Plan with additional projects to finish the retrofit effort in these basins. Many of the identified projects are under construction or on the 6-year CIP. These projects are being implemented to protect and restore receiving waters with the goal of meeting water quality standards necessary to reopen shellfish harvesting.
4. Kitsap Lake Watershed Restoration and Management Plan will be completed and have new projects identified for implementation over the next 10 years.

SMAP is an ongoing effort that will identify new priority basins and specific projects that will be added to the CIP. This effort follows Ecology's guidance.

S5.C.2 Public Education and Outreach

The public education and outreach program is the cornerstone to gaining citizen support and helps to develop a foundation for the stormwater program. Pollution prevention education identifies activities and actions that have a negative impact on our environment and local waters. Bremerton will continue to partner with West Sound Stormwater Outreach Group (WSSOG), a regional organization of Kitsap County and local cities.

The residential rain garden program will continue in 2022. The rain garden program provides stormwater management, pollution prevention, and water conservation educational and outreach information support to all areas within the city.

Pet waste bag dispensers' program will be supported in 2022 to raise awareness of the impact from pet waste left on the sidewalks and in our parks and to promote behavior change.

The primary focus for the upcoming year will be to continue the work with C+C on expanding and evaluating a social marketing campaign to address the new Natural Lawn Care behavior. Due to the ongoing concerns with COVID-19, partnering with the Master Gardeners to conduct online webinars will be critical to the success of the program. Additional tasks will include maintaining the existing Mutt Mitt, Spills Happen and PSSH programs.

S5.C.3 Public Involvement and Participation

Bremerton provides opportunities for the public to participate in SWMP decision-making and responds to questions and concerns when presented. The SWMP is posted on the City's website along with the annual report for the previous calendar year.

Cleanup events, such as the Sinclair Inlet Cleanup and other ad hoc cleanup efforts, will be coordinated with public groups who are interested in helping this year.

The Stormwater Comprehensive Plan Update will be presented to the public for reviewed and comment and be completed in 2022. Public input was used to inform plan development and helped define areas where issues exist. The plan addresses known issues in the 20-year CIP. More projects will be added through the SMAP assessment.

S5.C.4 MS4 Mapping and Documentation

Improvements to the maps, layers, and functionality of the system will continue in 2022. This includes updating missing attribute data for stormwater assets, and review of standards which will be updated as needed.

An interagency MOU is in place with Kitsap County, the City of Port Orchard will be in place by April. Sharing of GIS data and spill or ESC incidents are included in the MOU to assist with locating and addressing issues as they occur.

Outfall inventory is up-to-date and stormwater basin delineation is complete. New systems will be added to the maps as they are completed.

S5.C.5 Illicit Discharge Detection and Elimination (IDDE)

The city will continue to promote the “Spills Happen, Help Us Find Them” message and customer response hotline in 2022. Stormwater system, other utility, land use, and transportation GIS maps are accessible to Public Works staff via tablets.

In 2022, the program will continue to monitor water quality at outfalls, using the dry weather sampling plan, and will respond to notifications, complaints, and reports when they are submitted. This year, Bremerton will continue systematic screening of the MS4 in the Pine Road and Pacific Avenue Basins.

IDDE refresher training will be provided to staff whose job is to identify illicit discharges, track and correct these problems.

S5.C.6 Control Runoff from New Development, Redevelopment & Construction Sites

Development Engineering and Community Development review plans for new and redevelopment to enforce municipal codes that define construction and post-construction runoff control measures to prevent contaminated runoff.

Development activities such as plats, short plats, new site development and redevelopment that trigger thresholds, are required to provide stormwater control measures, install/use BMPs, use LID techniques and practices to meet Permit requirements. Trained staff ensure that plan submittals identify the use of appropriate measures to meet water quality and sediment standards by implementing controls and BMPs to prevent sediment laden runoff from entering the stormwater system.

Active construction sites are inspected once per week (at minimum), during and after large rain events or as needed to enforce compliance with the approved Temporary

Erosion Sediment Control (TESC) plan. Exceedance of water quality or sediment standards requires modification of BMPs through the adaptive management process or the project will be stopped by notice from the city. Projects that hold a Construction Stormwater General Permit, issued by Ecology, will be checked for appropriate installation and maintenance of BMPs, and good housekeeping practices. TESC inspections that identify BMP deficiencies will be provided to the site developer's CESCCL or site manager to be corrected. If they are unresponsive, the city will notify Ecology of the issue/s through the Environmental Report Tracking System (ERTS). It is expected that the Ecology inspectors will respond to the report and work with the developer to correct these issues, with Bremerton's support, until the issue is resolved. Bremerton strives to work with developers to meet all permit requirements using the most cost-effective approaches.

Good housekeeping practices are enforced for construction sites and all locations in Bremerton through inspections and code enforcement. Ecology's SWMMWW was adopted in BMC 15.04, with the most recent version being issued in 2019, as the standard for temporary erosion and sediment control BMPs. Division 2 of Bremerton's Engineering Design and Construction Standards were updated to reflect these requirements and provides a good tool for developers. In 2022, additional resources will be developed to provide guidance for developers, and staff who are involved with stormwater pollution prevention and general construction. Refresher training and program review will be completed in 2022.

S5.C.7 Pollution Prevention and Operation and Maintenance for Municipal Operations

Three divisions are responsible for stormwater system maintenance and operation: Public Works Stormwater (PWS), Facilities, and Parks Department. PWS maintains all stormwater infrastructure in the right-of-way and provides services for Facilities and Parks when requested. Facilities inspects and maintains all city owned properties with the of exception rights-of-way, and Park's facilities. Parks inspects and maintains their stormwater systems. When maintenance is needed that requires vacuum truck, jetting, or repairs that these divisions/departments can't complete, a work order request is submitted to PWS who will complete the requested work.

Facilities and Parks have their own facility SWPPPs. These include the following:

- Site map of the stormwater system, with spill kit locations, inventory of stormwater facilities and maintenance requirements,
- Documents to track inspections and maintenance activities,
- Spill control correction and countermeasures (SCCC) plan,
- Good housekeeping measures.

Bremerton operates two jet vacuum trucks and two sweepers throughout the year to maintain the stormwater system and protect runoff water quality. Collection of leaves, sediment, and trash from the road surface is an efficient method to protect water quality by reducing contaminates at the source.

PWS crew also maintain the sanitary sewer system so their time is split between the two systems. Beginning in 2022, city owned catch basins, ditches, and treatment

facilities within the right-of-way will be inspected and cleaned based on inspections results to implement a 2 year cycle for cleaning requirements.

2022 will be an active year with continued implementation of MS4 maintenance, annual inspections of stormwater treatment and flow control BMPs/facilities, spot checks, and implementation of SWPPPs for municipal properties, and facilities. Staff training will focus on changes in the Permit requirements, associated municipal code updates, proprietary treatment system maintenance, and LID requirements.

Practices associated with S5.C.7.d will be reviewed and updated as needed to ensure the city programs comply with Permit requirements. These policies, standard operating procedures, and plans will be collected and stored in a centralized locations for quick reference.

S5.C.8 Source Control Program for Existing Development

A source control program is a new requirement of the Permit that will be implemented on January 1, 2023.

In 2022 the city will update Stormwater codes through ordinances and develop the program to comply with the new requirement. Application of source control BMPs will be required for pollutant generating sources associated with existing land uses and activities identified in Appendix 8 of the Permit. The existing list of properties that meet the referenced Standard Industrial Classification (SIC) codes will be updated and prioritized to gain the most immediate benefit from the program.

Efforts will focus on meeting published deliverable dates established in the Permit.

Compliance with Total Maximum Daily Load (TMDL) Requirements

Prioritized system maintenance and inspections of private stormwater facilities for systems discharging to the MS4 in Pine Road and Pacific Avenue Basins will be performed in 2022.

Pet waste bag dispensers and trash cans have been installed throughout the city at sensitive locations for a total of 52 city-owned stations and approximately 18 additional units that are maintained by private citizens. Additional dispensers may be installed this year in ROW and city-owned properties as needed. The city provides over 170,000 pet waste bags per year and will continue to supply these at designated dispenser stations.

City of Bremerton TMDL Requirements and Actions in 2022

Western Washington Phase II Municipal Stormwater Permit Appendix 2	
Total Maximum Daily Load (TMDL) Requirements	
Name of TMDL	Sinclair and Dyes Inlets Fecal Coliform Bacteria Total Maximum Daily Load

Document(s) for TMDL	<i>Sinclair and Dyes Inlets Fecal Coliform Bacteria Total Maximum Daily Load (TMDL) Water Quality Implementation Plan</i> , In Draft, Ecology Publication No. 11-10-051. https://fortress.wa.gov/ecy/publications/publications/1110051.pdf
Location of Original 303(d) Listings	Dyes Inlet & Port Washington Narrows (WA-15-0020) Gorst Creek (WA-15-4000), Blackjack Creek (WA-15-4200) Annapolis Creek (WA-15-4400), Beaver Creek (WA-15-4900) Clear Creek (WA-15-5000), Barker Creek (WA-15-5100) Sinclair Inlet (WA-15-0040)
Area Where TMDL Requirements Apply	These requirements apply to areas served by MS4s listed below within the TMDL coverage area.
Parameter(s)	Fecal coliform bacteria
EPA Approval Date	July 5, 2012
MS4 Permittee:	Phase II Permit: City of Bainbridge Island, WAR04-5503; City of Bremerton, WAR04-5507; City of Port Orchard, WAR04-5536; Kitsap County, WAR04-5546

City of Bremerton (requirement language from the NPDES Permit)

- Designate any previously unscreened areas discharging via the MS4 to the TMDL area as the highest priority for illicit discharge detection and elimination routine field screening. Screen for bacteria sources when conducting illicit discharge detection and elimination field screening activities in these areas. Implement the schedules and activities identified in S5.C.5 of the Western Washington Phase II Permit for response to any illicit discharges found.
- Install and maintain pet waste education and collection stations at municipal parks and other Permittee owned and operated lands adjacent to stream and marine shorelines. Focus on locations where people commonly walk their dogs.